

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

5 Applicant(s): Riedl et al.
Docket No.: TWC-IPV-03-13/1033-14
Serial No.: 10/626,114
Filing Date: July 24, 2003
Group: 2623
10 Examiner: Jasmine N. Stokely-Collins

Title: Technique for Communicating Relatively High And Low Priority Data
Between a Terminal and a Remote Location

15

APPEAL BRIEF

20 Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

25 Sir:

Applicants hereby appeal the rejection dated October 7, 2008, of Claims
1-43 of the above-identified patent application.

REAL PARTY IN INTEREST

5 The present application is assigned to Time Warner Interactive Video Group Inc., as evidenced by an assignment recorded on March 11, 2004 in the United States Patent and Trademark Office at Reel 015055, Frame 0729, and by a change of name recorded on August 1, 2005 in the United States Patent and Trademark Office at Reel 016831, Frame 0218. The assignee, Time Warner Interactive Video Group Inc., is the real party in interest.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1 through 43 are presently pending in the above-identified patent application. Claims 1, 4-6, 24, and 27-29 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Petersen et al. (United States Patent No. 5,802,051)(hereinafter, "Petersen '051") in view of Petersen et al. (United States Patent No. 5,802,023) (hereinafter, "Petersen '023") and further in view of Mauger et al. (United States Patent No. 6,442,147)(hereinafter "Mauger"); Claims 2-3, 9-12, 14-22, 25-26, 32-35, and 37-42 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Petersen '051 in view of Petersen '023 and Mauger, and further in view of White at al. (United States Patent No. 6,392,664)(hereinafter, "White"); Claims 7-8 and 30-31 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Petersen '051 in view of Petersen '023 and Mauger, and further in view of Saito et al. (United States Patent No. 5,909,428)(hereinafter, "Saito"); Claims 13 and 36 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Petersen '051 in view of Petersen '023 and Mauger, and further in view of Williams (United States Patent No. 5,867,764)(hereinafter, "Williams"); and Claims 23 and 43 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Petersen '051 in view of Petersen '023, Mauger, and White, and further in view of Williams. Claims 1 through 43 are being appealed.

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the October 7, 2008 rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a system (FIG. 1, with detail of set top terminal 170-1 in FIG. 3; page 4, line 22 – page 8, line 8) for communicating data to a location (FIG. 1: 120) through a communications network (FIG. 1: 150). The system includes a mechanism (FIG. 3: 264; page 9, lines 4-10) for identifying first data (FIG. 2: 282; page 10, lines 19-22), which is accorded a higher priority than second data (FIG. 2: 278; page 10, lines 19-22) to be processed in the location. A data object (FIG. 2: 291; page 10, lines 19-22) for transporting the first data is generated in response to an identification of the first data. The data object has a predetermined data transport capacity, a header (FIG. 2: 292; page 6, lines 22-23), and an information section (FIG. 2: 294; page 6, lines 22-23). The first data is contained in the information section of the data object, without any data overhead portion associated with the first data within the information section (Note real time data 282 in payload 294 of cell 291 without any data overhead associated with real time data 282 being in the payload 294. In the example shown in FIG. 2, there is a data overhead 276 in payload 294, but it is associated with the second (non-real-time (NRT)) data 278). The system also includes a device (FIG. 3: 264; page 9, lines 18-24) for determining whether the predetermined data transport capacity exceeds the size of the first data by at least a threshold. At least some of the second data (e.g., NRT data 278 from buffer 266 in FIG. 3; page 10, lines 11-22) is inserted into the information section (FIG. 2: 294) of the data object when it is determined that the predetermined transport capacity exceeds the size of the first data by at least the threshold. The system further includes an interface (FIG. 3: 250; page 7, lines 23-25) for providing the data object to the location.

Independent Claim 14 is directed to an apparatus (FIG. 3: 170-1; page 7, line 12 – page 8, line 22) responsive to a command initiated by a user to affect a presentation of an entertainment program. The apparatus includes a processor (FIG. 3: 230; page 7, lines 14-25) for generating first data (FIG. 2: 282; page 10, lines 19-22) for effecting the command. The first data is accorded a higher priority than second data (FIG. 2: 278; page 10, lines 19-22) to be processed in a location (FIG. 1: 120) remote from the apparatus. The apparatus also includes a device (FIG. 3: 264; page 10, lines 19-

22) for generating a data object (FIG. 2: 291; page 10, lines 19-22) for transporting the first data. The data object has: (i) a header (FIG. 2: 292; page 6, lines 22-23), and (ii) an information section (FIG. 2: 294; page 6, lines 22-23). The first data (FIG. 2: 282) utilizes a portion of a data transport capacity of the information section in the data object, resulting in unused data transport capacity in the information section of the data object. The first data is contained in the information section of the data object, without any data overhead portion associated with the first data within the information section (Note real time data 282 in payload 294 of cell 291 without any data overhead associated with real time data 282 being in the payload 294. In the example shown in FIG. 2, there is a data overhead 276 in payload 294, but it is associated with the second (non-real-time (NRT)) data 278). At least some of the second data (FIG. 2: 278) is inserted in the information section (FIG. 2: 294) of the data object to utilize the unused data transport capacity. The apparatus further includes an interface (FIG. 3: 250; page 7, lines 23-25) for sending the data object to the remote location for processing thereof.

Independent Claim 24 is directed to a method (FIG. 4) for use in a system for communicating data to a location through a communications network. The method includes identifying first data (FIG. 4: 403; page 9, lines 4-6), which is accorded a higher priority than second data to be processed in the location. The method further includes generating a data object (FIG. 2: 291; page 9, lines 4-6) for transporting the first data in response to an identification of the first data. The data object (FIG. 2: 291) has a predetermined data transport capacity, a header (FIG. 2: 292), and an information section (FIG. 2: 294). The first data is contained in the information section of the data object, without any data overhead portion associated with the first data within the information section (Note real time data 282 in payload 294 of cell 291 without any data overhead associated with real time data 282 being in the payload 294. In the example shown in FIG. 2, there is a data overhead 276 in payload 294, but it is associated with the second (non-real-time (NRT)) data 278). The method still further includes determining whether the predetermined data transport capacity exceeds the size of the first data by at least a threshold (FIG. 4: 415, 420; page 9, line 18 – page 10, 22), as well as inserting at least some of the second data into the information section of the data object when it is

determined that the predetermined transport capacity exceeds the size of the first data by at least the threshold (FIG. 4: 435; page 10, lines 19-21). The method yet further includes providing the data object to the location (FIG. 4: 445; page 10, lines 21-22).

Independent Claim 37 is directed to a method (FIG. 4) for use in an
5 apparatus responsive to a command initiated by a user to affect a presentation of an entertainment program. The method includes generating first data (FIG. 2: 282; page 10, lines 19-22) for effecting the command. The first data is accorded a higher priority than second data (FIG. 2: 278; page 10, lines 19-22) to be processed in a location (FIG. 1: 120) remote from the apparatus (FIG. 3: 170-1). The method also includes generating a
10 data object (FIG. 2: 291; page 10, lines 19-22) for transporting the first data. The data object has: (i) a header (FIG. 2: 292; page 6, lines 22-23), and (ii) an information section (FIG. 2: 294; page 6, lines 22-23). The first data utilizes a portion of a data transport capacity of the information section in the data object, resulting in unused data transport capacity in the information section of the data object. The first data is contained in the
15 information section of the data object, without any data overhead portion associated with the first data within the information section (Note real time data 282 in payload 294 of cell 291 without any data overhead associated with real time data 282 being in the payload 294. In the example shown in FIG. 2, there is a data overhead 276 in payload 294, but it is associated with the second (non-real-time (NRT)) data 278). The method
20 further includes inserting at least some of the second data in the information section of the data object to utilize the unused data transport capacity (FIG. 4: 435; page 10, lines 19-21), as well as sending the data object to the remote location for processing thereof (FIG. 4: 445; page 10, lines 21-22).

STATEMENT OF GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1, 4-6, 24, and 27-29 are unpatentable under 35 U.S.C. § 103(a) over Petersen '051 in view of Petersen '023 and further in view of Mauger.

Whether Claims 2-3, 9-12, 14-22, 25-26, 32-35, and 37-42 are
5 unpatentable under 35 U.S.C. § 103(a) over Petersen '051 in view of Petersen '023 and Mauger, and further in view of White.

Whether Claims 7-8 and 30-31 are unpatentable under 35 U.S.C. § 103(a) over Petersen '051 in view of Petersen '023 and Mauger, and further in view of Saito.

Whether Claims 13 and 36 are unpatentable under 35 U.S.C. § 103(a)
10 over Petersen '051 in view of Petersen '023 and Mauger, and further in view of Williams.

Whether Claims 23 and 43 are unpatentable under 35 U.S.C. § 103(a) over Petersen '051 in view of Petersen '023, Mauger, and White, and further in view of Williams.

ARGUMENT

Rejection under 35 U.S.C. 103(a) as allegedly unpatentable over Petersen '051, Petersen '023, and Mauger

Claims 1, 4, and 5

5 Claim 1 was rejected under 35 U.S.C. 102(a) as allegedly being unpatentable over a proposed combination of Petersen '051, Petersen '023, and Mauger. Claim 1 is directed to a system (FIG. 1, with detail of set top terminal 170-1 in FIG. 3) for communicating data to a location (FIG. 1: 120) through a communications network (FIG. 1: 150). The system includes a mechanism (FIG. 3: 264) for identifying first data
10 (FIG. 2: 282; page 10, lines 19-22), which is accorded a higher priority than second data (FIG. 2: 278; page 10, lines 19-22) to be processed in the location. The first data can be, for example, real-time data such as a trick mode command which needs to be promptly sent to the head end to effectuate the trick mode action in real time. A data object such as an ATM cell (FIG. 2: 291) for transporting the first data is *generated in response to an*
15 *identification of the first data*. The data object has a predetermined data transport capacity, a header (FIG. 2: 292), and an information section (FIG. 2: 294). The first data is contained in the information section of the data object, *without any data overhead portion associated with the first data within the information section* (Note real time data 282 in payload 294 of cell 291 without any data overhead associated with real time data
20 282 being in the payload 294. In the example shown in FIG. 2, there is a data overhead 276 in payload 294, but it is associated with the second (non-real-time (NRT)) data 278). Stated in another way, the data object is created for the purpose of sending the first (real time) data.

The system also includes a device (FIG. 3: 264) for determining whether
25 the predetermined data transport capacity exceeds the size of the first data by at least a threshold. At least some of the second data (e.g., element 278 in FIG. 2 from buffer 266 in FIG. 3) is inserted into the information section (FIG. 2: 294) of the data object when it is determined that the predetermined transport capacity exceeds the size of the first data by at least the threshold. Stated in another way, if there is extra room in the payload of
30 the data object (such as an ATM cell) which has been created for the purpose of

transporting the first (e.g., real time) data, second data, which can be of a lower priority (such as non-real-time data), is placed in the payload to take up at least some of the extra room. The system further includes an interface (FIG. 3: 250) for providing the data object (e.g., ATM cell) to the location (e.g., head end). The second data may or may not have a data overhead portion within the information section. For example, in some embodiments, there is a non-real-time data overhead portion 276 – see Claim 7 below. In other instances, there is no need to transmit a non-real-time data overhead portion. Page 11, lines 19-21; see Claim 6 below.

As noted, Claim 1 was rejected under 35 U.S.C. 102(a) as allegedly being unpatentable over a proposed combination of Petersen '051, Petersen '023, and Mauger. Petersen '051 is directed to insertion of minicells into a larger ATM cell. Petersen '051 col. 8 lines 36-45. Each minicell has a header. Petersen '051 FIGS. 7A and 7B. A priority multiplexer selects minicells according to priority and multiplexes them into a payload of a current ATM cell. Petersen '051 col. 8 lines 36-45. Thus, Petersen '051 employs a complex process wherein there are two operations for breaking up data into, first, minicells, each with its own header, and then ATM cells. The same is true of Petersen '023. As set forth at Petersen '023 col. 2 lines 34-36: each minicell has a header. Petersen '023, at column 5 lines 21-32, does mention special decoupling minicells that have no header; however, such decoupling minicells *also do not have a payload, id.* at column 5, lines 24-25. Mauger is directed to a connectionless communications network for satellites and the like. One passage (column 9, lines 56-62) mentions that header suppression can be used to remove headers when minicells are carried directly on the physical layer.

The rejection of Claim 1 is improper because:

(i) the proposed combination of Petersen '051, Petersen '023, and Mauger is improper; and

(ii) even if combined, the combination fails to teach or suggest the claimed limitations of *a data object for transporting the first data being generated in response to an identification of the first data and the first data being without any data overhead portion associated with the first data within the information section.*

The Proposed Combination is Improper

With regard to point (i), in the wake of *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007), MPEP 2143 provides that exemplary rationales that may support a conclusion of obviousness include, *inter alia*, some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. MPEP 2143 at 2100-128. MPEP 2143(G) further provides that, to reject a claim based on this rationale, office personnel must . . . articulate the following:

(1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) a finding that there was reasonable expectation of success; and (3) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. MPEP 2143(G) at 2100-138. On page 5 of the Office Action, the Examiner asserts that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Petersen (‘051) and Petersen (‘023) for the benefit of efficiently using bandwidth to transmit ATM cells” and (with regard to Mauger) that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to remove any unnecessary or redundant header information for the benefit of efficiently utilizing space in the ATM cell.” As noted, MPEP 2143(G) addresses a rationale based on teaching, suggestion, or motivation to combine. However, combination is *improper* where, as here:

1. There is *no such teaching, suggestion, or motivation*;
2. The Examiner’s rationale does not state a motivation to *arrive at the claimed invention*; and
3. There is no reasonable expectation of success.

With regard to points 1 and 3, both Petersen '023 and Petersen '051 *could not function* without the minicell headers. With reference to FIGS. 7A and 7B of Petersen '051, on the receive side, it would be impossible to identify the location of the user data without the headers of the minicells, and the receiving station would not be able to pass same to the correct sublayers. This point is amplified by column 6, lines 50-55 of Petersen '051. The same is true in Petersen '023. With reference to FIG. 6 thereof, without the minicell header, the performance of step 615 would be impossible. The same is true for step 815 in FIG. 8. Where, as in Petersen '023 and '051, multiple minicells are placed into a single ATM cell, the suppression of headers in the minicells would render the systems inoperable since it would be impossible to determine what to do with the minicells' data on the receive side. Accordingly, there is no teaching, suggestion, or motivation to combine Petersen '023 and '051 with Mauger, since Petersen '023 and '051 require the minicell headers to function; furthermore, there would be no reasonable expectation of success in such a combination, again, because Petersen '023 and '051 require the minicell headers to function; yet further, the proposed modification of Petersen '023 and '051 with header suppression of Mauger would render them unsatisfactory for their intended purpose, MPEP 2143.01 V, since Petersen '023 and '051 could not achieve the purpose of re-assembling the minicells on the receive side without their headers.

With regard to point 2, the Examiner's alleged motivation to "remove any unnecessary or redundant header information," is not a motivation to *arrive at the claimed invention*. The invention claimed in Claim 1 is simply not directed to header suppression. In the presently claimed invention of Claim 1, the data object, which has a header, is generated in response to an identification of the first data. The *header* of the data object (e.g., ATM cell) thus *is the header for the first data*, and there is no data overhead portion associated with the first data within the information section *ab initio*; thus no header for the first data in the information section would need to be suppressed.

Even if Combined, the References Do Not Render Every Claim Limitation

Obvious

With regard to point (ii), the Examiner admits, at page 5 of the Office Action, that Petersen '051 and Petersen '023 fail to teach or suggest *the first data being without any data overhead portion associated with the first data within the information section*. The Examiner asserts that this deficiency in Petersen '051 and Petersen '023 is cured by Mauger, and points to column 9, lines 57-62 of Mauger, asserting that such passage teaches that "headers are removed where they are not required" in "the known technique of header suppression." However, as noted, the presently claimed invention is not directed to header suppression. In the presently claimed invention of Claim 1, the data object, which has a header, is generated in response to an identification of the first data. The header of the data object (e.g., ATM cell) thus is the header for the first data, and there is no data overhead portion associated with the first data within the information section *ab initio*; thus no header for the first data in the information section would need to be suppressed.

The Examiner further admits, at page 3 of the Office Action, that Petersen '051 does not teach the data object *being generated in response to an identification of the first data*. The Examiner asserts that this deficiency in Petersen '051 is cured by column 5, lines 11-15 and 35-41 of Petersen '023; in particular, the Examiner asserts that "the ATM cell is constructed and then completed with a header based on the arrival of minicells." However, the cited passage simply describes a continuously repeating process wherein minicells are placed in the payload portion of an ATM cell, which is sent out when the payload is filled up. Petersen '023 column 5 lines 42-45. There is no indication that the construction of the ATM cell is responsive to *identification of first (for example, real time) data (such as a trick mode command)*, as in the claimed invention; fullness of the current cell appears to be the sole criteria.

Claims 4 and 5 are patentable for at least the reasons set forth with respect to Claim 1.

Accordingly, the Examiner's rejection of Claims 1, 4, and 5 as unpatentable over the combination of Petersen '051, Petersen '023, and Mauger is

improper and should be reversed by the board.

Claim 6

Claim 6 further defines the threshold recited in Claim 1 as having a zero value. Such a condition occurs, as set forth in the specification at page 11, lines 19-21, when *no data overhead is needed for the second (non-real time) data*. The Examiner alleges, on page 6 of the Office Action, that the limitation with regard to a zero threshold is met by Petersen '023 column 5 lines 15-18, wherein data is added to a cell until it is full. However, the claimed zero threshold is used for comparing the data transport capacity of the data object (e.g., ATM cell) with the size of the first (e.g., real time) data; some of the second (e.g., non-real-time) **data** (i.e., data *per se*) is inserted into the information section of the data object (e.g., payload portion of the ATM cell) when the capacity of the data object exceeds the size of the first data by the threshold (here, zero, in the case where there is no data overhead for the non-real-time data). As noted elsewhere, each and every data-containing minicell in the Petersen '023 reference has a *minicell header*, and thus the cited passage of Petersen '023 refers to adding minicells with both data and *minicell headers* to the cell. Thus, the Petersen '023 passage refers to packing a cell with combined minicells *including both data and minicell headers* until it is full, **not** to comparing the data transport capacity of the data object (e.g., ATM cell) with the size of the first (e.g., real time) data (which is contained in the information section of the data object without any data overhead portion within the information section) to determine whether there is space for some of the second (e.g., non-real-time) **data** (i.e., data *per se* (e.g., 278 in FIG. 2)).

Accordingly, the Examiner's rejection of Claim 6 as unpatentable over the combination of Petersen '051, Petersen '023, and Mauger is improper and should be reversed by the board.

Claims 24, 27, and 28

The above analysis of Claim 1 applies equally to the rejection of Claim 24. Claims 27 and 28 are patentable at least due to dependency on Claim 24. Accordingly,

the Examiner's rejection of Claims 24, 27, and 28 as unpatentable over the combination of Petersen '051, Petersen '023, and Mauger is improper and should be reversed by the board.

5 Claim 29

The above analysis of Claim 6 applies equally to the rejection of Claim 29. Accordingly, the Examiner's rejection of Claim 29 as unpatentable over the combination of Petersen '051, Petersen '023, and Mauger is improper and should be reversed by the board.

10

Rejection under 35 U.S.C. 103(a) as allegedly unpatentable over Petersen '051, Petersen '023, Mauger, and White

Claims 2, 3, and 9-12

15 Claims 2, 3, and 9-12 are patentable for at least the reasons set forth with respect to Claim 1. White was cited only for a cable television network and does not cure the deficiencies noted above in the arguments with regard to Claim 1. Accordingly, the Examiner's rejection of Claims 2, 3, and 9-12 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and White is improper and should be reversed by the board.

20

Claims 14-22

The rejection of Claim 14 is improper because:

(i) the proposed combination of Petersen '051, Petersen '023, Mauger, and White is improper; and

25

(ii) even if combined, the combination fails to teach or suggest the claimed limitation of *the first data being without any data overhead portion associated with the first data within the information section.*

30 The reasoning with regard to points (i) and (ii) is similar to that set forth in the discussion of Claim 1 above. White was cited only for a cable television network and does not cure the deficiencies noted above in the arguments with regard to Claim 1.

Claims 15-22 are patentable for at least the reasons set forth with respect to Claim 14.

Accordingly, the Examiner's rejection of Claims 14-22 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and White is improper and should be reversed by the board.

Claims 25, 26, and 32-35

Claims 25, 26, and 32-35 are patentable at least due to dependency on Claim 24. White was cited only for a cable television network and does not cure the deficiencies noted above in the arguments with regard to Claim 24. Accordingly, the Examiner's rejection of Claims 25, 26, and 35 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and White is improper and should be reversed by the board.

Claims 37-42

The above analysis of Claim 14 applies equally to the rejection of Claim 37.

Claims 38-42 are patentable for at least the reasons set forth with respect to Claim 37.

Accordingly, the Examiner's rejection of Claims 37-42 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and White is improper and should be reversed by the board.

Rejection under 35 U.S.C. 103(a) as allegedly unpatentable over Petersen

'051, Petersen '023, Mauger, and Saito

Claims 7 and 8

Claim 7 further limits Claim 1 by reciting that the threshold corresponds to the size of the data overhead (element 276 in FIG. 2) associated with the second (e.g., non-real-time) data. The Examiner admits, on page 14 of the Office Action, that this limitation is not found in Petersen '023, Petersen '051, or Mauger, but alleges that it is

rendered obvious by column 1, lines 36-38 of Saito. The cited passage of Saito refers to FIG. 14B wherein an ATM cell with a smaller than standard payload is used in low bit rate applications. This passage *simply has no connection whatsoever* to the claimed feature of Claim 7. The reduced payload cell of Saito *does not have first and second data* therein as in the claimed invention of Claim 7. Rather than *using extra space* in a cell, as in the claimed invention, *the cited passage of Saito does away with the extra space*, thus *directly teaching away* from the claimed invention.

The claimed threshold corresponding to the size of the data overhead (element 276 in FIG. 2) associated with the second (e.g., non-real-time) data (element 278 in FIG. 2) is used for comparing the data transport capacity (element 294 in FIG. 2) of the data object (e.g., ATM cell 291 in FIG. 2) with the size of the first (e.g., real time) data (element 282 in FIG. 2); some of the second (e.g., non-real-time) *data* (i.e., data *per se*)(element 278 in FIG. 2) is inserted into the information section of the data object (e.g., payload portion 294 of the ATM cell 291 in FIG. 2) when the capacity of the data object exceeds the size of the first data by the threshold (here, the threshold is the size of the data overhead associated with the second data (NRT data 276 as shown in FIG. 2)).

Claim 8 is patentable for at least the reasons set forth with respect to Claim 7.

Accordingly, the Examiner's rejection of Claims 7 and 8 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and Saito is improper and should be reversed by the board.

Claims 30 and 31

The above analysis of Claim 7 applies equally to the rejection of Claim 30.

Claim 31 is patentable at least due to dependency on Claim 30.

Accordingly, the Examiner's rejection of Claims 30 and 31 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and Saito is improper and should be reversed by the board.

Rejection under 35 U.S.C. 103(a) as allegedly unpatentable over Petersen '051, Petersen '023, Mauger, and Williams

Claims 13 and 36

5 Claims 13 and 36 are patentable for at least the reasons set forth with respect to Claims 1 and 24, respectively. Williams was cited only for diagnostics data and does not cure the deficiencies noted above with regard to the arguments pertaining to Claims 1 and 24. Accordingly, the Examiner's rejection of Claims 13 and 36 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, and Williams is improper and should be reversed by the board.

10

Rejection under 35 U.S.C. 103(a) as allegedly unpatentable over Petersen '051, Petersen '023, Mauger, White, and Williams

Claims 23 and 43

15 Claims 23 and 43 are patentable for at least the reasons set forth with respect to Claims 14 and 37, respectively. White and Williams were cited only for a cable television network and diagnostic data, and do not cure the above-noted deficiencies. Accordingly, the Examiner's rejection of Claims 23 and 43 as unpatentable over the combination of Petersen '051, Petersen '023, Mauger, White, and Williams is improper and should be reversed by the board.

Conclusion

The rejections of the cited claims under section 103 in view of Petersen '051, Petersen '023, Mauger, White, Saito, and Williams, alone or in any combination, are therefore believed to be improper and should be withdrawn.

The attention of the Examiner and the Appeal Board to this matter is appreciated.

Respectfully,



Date: March 6, 2009

Paul J. Osterstedt
Attorney for Applicant(s)
Reg. No. 37,411
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06824
(203) 255-6560

APPENDIX

1. A system for communicating data to a location through a communications network, comprising:

- 5 a mechanism for identifying first data, which is accorded a higher priority than second data to be processed in the location, a data object for transporting the first data being generated in response to an identification of the first data, the data object having:

a predetermined data transport capacity,

a header, and

- 10 an information section,

the first data being contained in the information section of the data object, the first data being without any data overhead portion associated with the first data within the information section;

- a device for determining whether the predetermined data transport capacity
15 exceeds the size of the first data by at least a threshold, at least some of the second data being inserted into the information section of the data object when it is determined that the predetermined transport capacity exceeds the size of the first data by at least the threshold; and

an interface for providing the data object to the location.

20

2. The system of claim 1 wherein the communications network includes a cable network.

3. The system of claim 2 wherein the location includes a headend.

4. The system of claim 1 wherein the data object includes a data cell in an asynchronous transfer mode (ATM) format.

5

5. The system of claim 1 wherein the data object includes a packet.

6. The system of claim 1 wherein the threshold has a zero value.

10 7. The system of claim 1 wherein the threshold corresponds to the size of an overhead associated with the inserted second data.

8. The system of claim 7 wherein the overhead includes an indicator indicative of a placement of the inserted second data among the rest of the second data.

15

9. The system of claim 1 further comprising a processor for presenting an entertainment program, wherein the first data includes data representing a command for manipulation of a presentation of the entertainment program.

20 10. The system of claim 9 wherein the presentation includes a video-on-demand (VOD) presentation.

11. The system of claim 9 wherein the manipulation includes a selected one of a fast-

forward, rewind, play and pause of the presentation.

12. The system of claim 1 further comprising a processor responsive to a user request for selectively presenting entertainment programming content, wherein the second data
5 concerns selections of entertainment programming content presentations.

13. The system of claim 1 wherein the second data concerns diagnostics of at least part of the system.

- 10 14. Apparatus responsive to a command initiated by a user to affect a presentation of an entertainment program, comprising:

a processor for generating first data for effecting the command, the first data being accorded a higher priority than second data to be processed in a location remote from the apparatus;

- 15 a device for generating a data object for transporting the first data, the data object having: (i) a header, and (ii) an information section, the first data utilizing a portion of a data transport capacity of the information section in the data object, resulting in unused data transport capacity in the information section of the data object, the first data being contained in the information section of the data object, the first data being without any
20 data overhead portion associated with the first data within the information section, at least some of the second data being inserted in the information section of the data object to utilize the unused data transport capacity; and

an interface for sending the data object to the remote location for processing

thereof.

15. The apparatus of claim 14 comprising a set-top terminal.

5 16. The apparatus of claim 14 wherein the remote location includes a headend in a broadband communications system.

17. The apparatus of claim 16 wherein the broadband communications system includes a cable network.

10

18. The apparatus of claim 14 wherein the data object includes a data cell in an ATM format.

19. The apparatus of claim 14 wherein the data object includes a packet.

15

20. The apparatus of claim 14 wherein the presentation includes a VOD presentation.

21. The apparatus of claim 14 wherein the command concerns a selected one of a fast-forward, rewind, play and pause of the presentation.

20

22. The apparatus of claim 14 further comprising a processor responsive to a user request for selectively presenting entertainment programming content, wherein the second data concerns selections of entertainment programming content presentations.

23. The apparatus of claim 14 wherein the second data concerns diagnostics of at least part of the apparatus.

5 24. A method for use in a system for communicating data to a location through a communications network, the method comprising:

identifying first data, which is accorded a higher priority than second data to be processed in the location;

generating a data object for transporting the first data in response to an
10 identification of the first data, the data object having:

a predetermined data transport capacity,

a header, and

an information section,

the first data being contained in the information section of the data object, the first
15 data being without any data overhead portion associated with the first data within the information section;

determining whether the predetermined data transport capacity exceeds the size of the first data by at least a threshold;

inserting at least some of the second data into the information section of the data
20 object when it is determined that the predetermined transport capacity exceeds the size of the first data by at least the threshold; and

providing the data object to the location.

25. The method of claim 24 wherein the communications network includes a cable network.

26. The method of claim 25 wherein the location includes a headend.

5

27. The method of claim 24 wherein the data object includes a data cell in an ATM format.

28. The method of claim 24 wherein the data object includes a packet.

10

29. The method of claim 24 wherein the threshold has a zero value.

30. The method of claim 24 wherein the threshold corresponds to the size of an overhead associated with the inserted second data.

15

31. The method of claim 30 wherein the overhead includes an indicator indicative of a placement of the inserted second data among the rest of the second data.

32. The method of claim 24 further comprising presenting an entertainment program,
20 wherein the first data includes data representing a command for manipulation of a presentation of the entertainment program.

33. The method of claim 32 wherein the presentation includes a video-on-demand

(VOD) presentation.

34. The method of claim 32 wherein the manipulation includes a selected one of a fast-forward, rewind, play and pause of the presentation.

5

35. The method of claim 24 further comprising selectively presenting entertainment programming content in response to a user request, wherein the second data concerns selections of entertainment programming content presentations.

10 36. The method of claim 24 wherein the second data concerns diagnostics of at least part of the system.

37. A method for use in an apparatus responsive to a command initiated by a user to affect a presentation of an entertainment program, the method comprising:

15 generating first data for effecting the command, the first data being accorded a higher priority than second data to be processed in a location remote from the apparatus;

generating a data object for transporting the first data, the data object having: (i) a header, and (ii) an information section, the first data utilizing a portion of a data transport capacity of the information section in the data object, resulting in unused data transport
20 capacity in the information section of the data object, the first data being contained in the information section of the data object, the first data being without any data overhead portion associated with the first data within the information section;

inserting at least some of the second data in the information section of the data

object to utilize the unused data transport capacity; and
sending the data object to the remote location for processing thereof.

38. The method of claim 37 wherein the data object includes a data cell in an ATM
5 format.

39. The method of claim 37 wherein the data object includes a packet.

40. The method of claim 37 wherein the presentation includes a VOD presentation.
10

41. The method of claim 37 wherein the command concerns a selected one of a fast-
forward, rewind, play and pause of the presentation.

42. The method of claim 37 further comprising selectively presenting entertainment
15 programming content in response to a user request, wherein the second data concerns
selections of entertainment programming content presentations.

43. The method of claim 37 wherein the second data concerns diagnostics of at least
part of the apparatus.

EVIDENCE APPENDIX

There is no evidence submitted pursuant to § 1.130, 1.131, or 1.132 or entered by the Examiner and relied upon by appellant.

RELATED PROCEEDINGS APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37.